



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,957	08/31/2006	Peter Faile	WW033USU	9477

27623 7590 01/16/2008
OHLANDT, GREELEY, RUGGIERO & PERLE, LLP
ONE LANDMARK SQUARE, 10TH FLOOR
STAMFORD, CT 06901

EXAMINER

NGUYEN, NINH H

ART UNIT	PAPER NUMBER
----------	--------------

3745

MAIL DATE	DELIVERY MODE
-----------	---------------

01/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,957

Applicant(s)

FAILE ET AL.

Examiner

Ninh H. Nguyen

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8, 10-15, 19 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 8, 10-15, 19 and 22-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/07/2007 have been fully considered but they are not persuasive.

Applicant amends independent claims 1 and 19 to recite an oblong displacement unit and argues that Donaldson does not disclose this newly added feature. Applicant further argues that Moody fails to disclose the displacement unit is support by rods connected to the pipe as claimed.

The Examiner respectfully disagrees.

According to the definition provided by the Webster's II New Riverside University Dictionary, oblong means (a.) having a shape of or like an ellipse or rectangle, or (b.) having a long dimension, esp. having one of two perpendicular dimension, as with or length, greater than the other. The shape of the displacement unit 5 as shown in Figures 1, 3a, 5, and 6 is axially elongated but clearly is neither elliptical nor rectangular. Further, page 7, lines 10-11 of the specification does not disclose the displacement unit being oblong. Therefore, the recitation of an oblong displacement unit constitutes new matter. The displacement unit 42 of Donaldson as shown in Figure 7 has substantially parallel sides, and therefore, is substantially oblong.

Specification

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The disclosure is objected to because of lack of support for the limitations of the displacement unit having an oblong shape as amended in claims 1 and 19.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 8, 10-15, 19, and 22-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims are amended to include the limitation of the displacement unit being oblong shaped which is not supported by the specification wherein oblong is understood according to the definition provided in the response to arguments above.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 8, 9, 11, 14, 16-21, 23, 25, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Donaldson.

Donaldson discloses a turbine (Figs. 1-11) comprising: a runner having one or more rotor blades and a hub (Figs. 7-9); a housing having a distributor 30 that regulates flow of the medium

into the runner; a pipe 60 that guides the medium flowing out from the runner and having an inlet diffuser; and a substantially oblong displacement unit 62 in the pipe and having an upstream end in proximity to the hub, wherein the displacement unit has a variable width (Figs. 7-9); wherein the width of the displacement unit increases in the direction of flow of the medium (Fig. 7).

Regarding claims 11, and 23, the displacement unit is supported by rods 64 connected to the pipe.

Regarding claim 14 and 25, the pipe runs along a substantially straight line (Fig. 7).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 11, 15, 19, 23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moody (1,919,376) in view of Moody (2,262,191), which from hereon referred to as Moody '376 and Moody '191, respectively.

Moody '376 discloses a turbine (Figs. 1-18) comprising: a runner having one or more rotor blades and a hub (Fig. 1); a housing having a distributor 21 that regulates flow of the medium into the runner; a pipe 28 that guides the medium flowing out from the runner and having an inlet diffuser; and a displacement unit 27 in the draft tube and having an upstream end in proximity to the hub, wherein the displacement unit has a variable width (Fig. 1); wherein the width of the displacement unit increases in the direction of flow of the medium (Fig. 1).

However, Moody '376 does not disclose the displacement unit being oblong shaped as claimed.

Moody '191 teaches a pump assembly comprising housing having a volute 3, a runner having blades 3 disposed in the volute, an inlet pipe attached to the pump housing, an air discharge unit comprising a substantially oblong displacement unit forming a chamber 7 supported by vanes or rods 5 attached to the inlet pipe, the chamber 7 receives air from an air source and blows out through chamber output 8 to brake up the void form about the axis of the suction pipe to prevent cavitation (page 2, left column, lines 16-32).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made, to make the turbine of Moody '376 with the air discharge unit of Moody '191 for the purpose of preventing damages to the turbine in pumping mode as taught by Moody '191.

Regarding claims 11, and 23, the displacement unit is supported by rods 5 connected to the pipe.

Regarding claim 15 and 26, the pipe is curved (Fig. 7).

9. Claims 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donaldson.

Donaldson discloses all the limitations except the pipe is not curved as claimed.

Since the applicant has not disclosed that having the pipe being curved solves any stated problem or is for any particular purpose above the fact that the pipe is for conducting the flow of water from the turbine, and it appears that the pipe of Donaldson would perform equally well

with the shape as defined and claimed by applicant, it would have been an obvious matter of design choice to modify the pipe of Donaldson by utilizing the specific shape as claimed.

Conclusion

10. Applicant's amendment, introducing the new limitation of an oblong displacement unit, necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

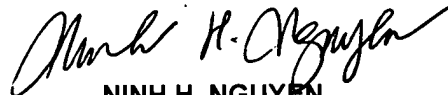
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

Application/Control Number:
10/538,957
Art Unit: 3745

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).


NINH H. NGUYEN
PRIMARY EXAMINER

Nhn
01/11/08